

ABSTRACT OF THE DISCLOSURE

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In a semiconductor photo-detector of the present invention, a first semiconductor layer, a second semiconductor layer having, and a photo-absorption part composed of a photo-absorption layer sandwiched between these layers are disposed on a substrate, at least the photo-absorption layer is formed at a position apart inwardly by a finite length from an end surface of the substrate, an end surface of the second semiconductor layer and the substrate or the end surface of the substrate is provided with a light incident facet angled inwardly as it separates from the surface of the second semiconductor or the surface of the substrate. Further, a groove as a guide of an optical waveguide for guiding incident light is disposed opposing the light incident facet, or the substrate end surface at the light incident facet side is protruded by a finite length from a tip part of the light incident facet, or between the optical waveguide and the semiconductor photo-detector is buried in a solid or liquid, or a main reaching area of incident light refracted at an upper layer of the photo-absorption layer is terminated with a substance having a smaller refractive index than the semiconductor layer of

photo-absorption region part, or the light incident facet and its vicinity are buried in an organic substance.

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